GPS Car Tracker

Easy Tracking for Automotive

User Manual

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V2.0

Please read these instructions carefully before installing or using this product and keep the manual at handy for reference when installing!

Caution

1. Carefully read this manual before start.
2. **Be sure to remove the PIN code before insert SIM card into tracker** (one can use a mobile to check if there is a PIN code and remove it).
3. In order to properly receive the GPS RF signals, tracker needs to be operated under open sky environment.
4. User's mobile need to enable GPRS or 3G data connection for directly link to map information.
5. Do not attempt to open the device other than instructed in this manual.
6. Use original or approved accessories only.
7. Solarprotect windows in cars will influence the GPS signal receiving.

Features

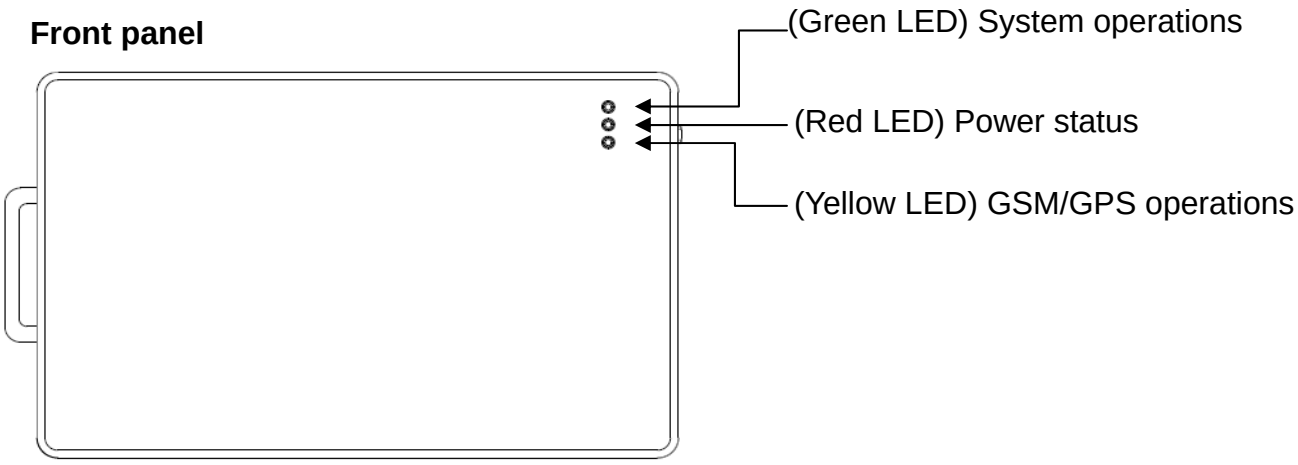
- Simple location report through mobile SMS
- Vibration sensor for intrusion or unexpected movement warning
- Easy and intuitive SMS command system
- Simple Google map® URL for location map on your phone
- Simple peer-2-peer protocol without monthly service charge
- Pre-paid card (SIM card) can be used at lowest communication fee
- Smart Continuous Tracking for speedy GPS location fix
- Tested for roaming in multiple operators' environment
- very small Size of a Credit Card

The **GPS car Tracker** is equipped with high quality GSM and GPS modules. User can actively spot its location or a tracker can actively warn its owner for any expected intrusion by simply activated its embedded sensor.

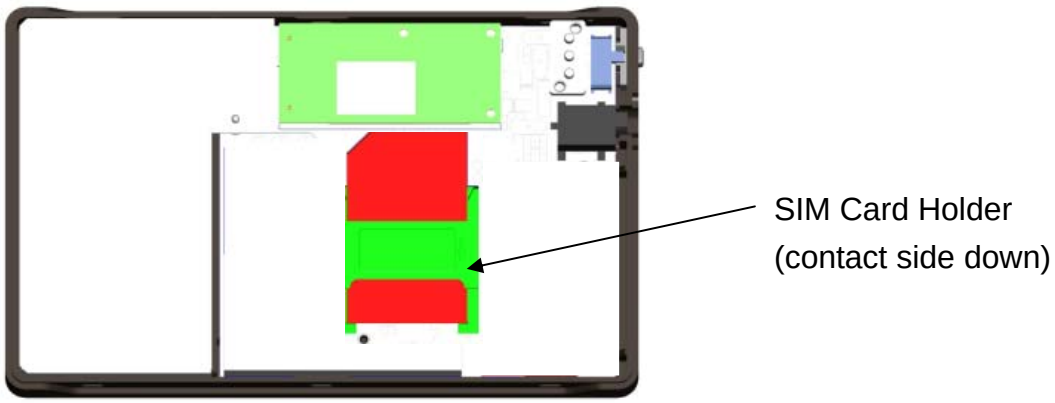
GPS car Tracker can be easily configured through its easy and comprehensive SMS command set. And user can easily identify its location by a click on URL in its SMS response.

Indicator and Controls

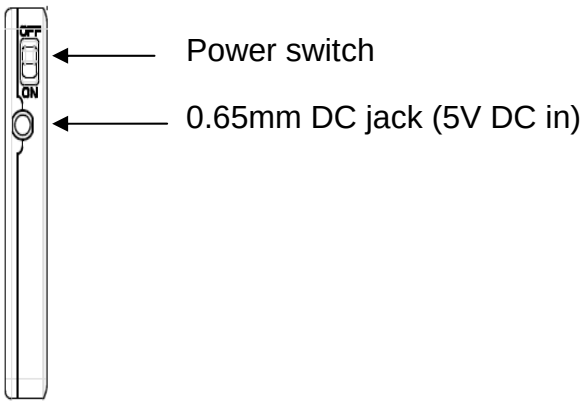
Front panel



Internal view



Bottom view



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Accessories

1. USB charging cable

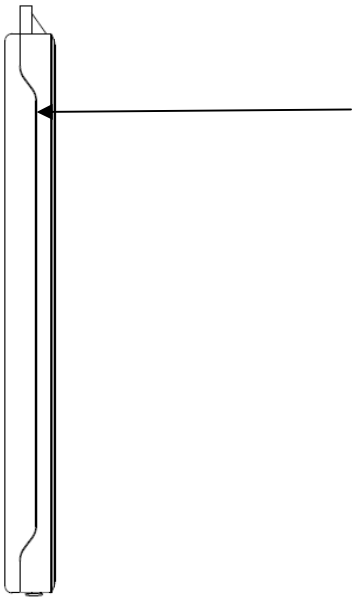
2. 5.5 m vehicle usage DC 12V to DC 5V adapter and power line set

LED Status

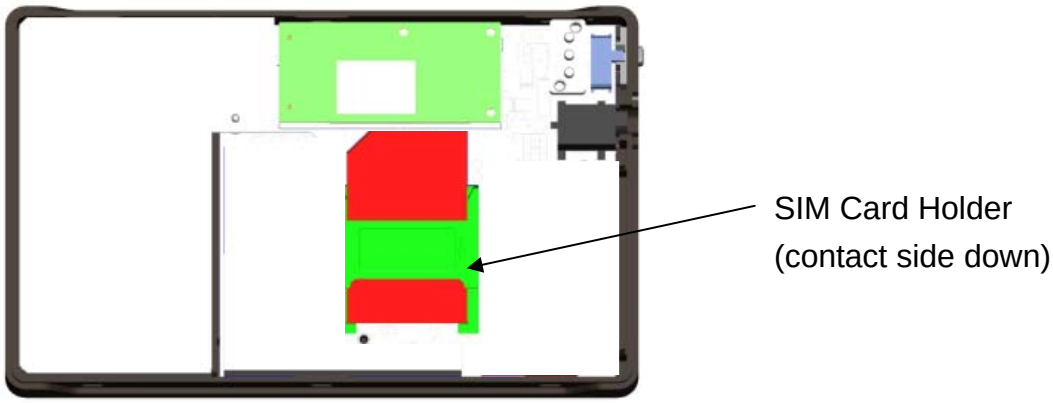
LED	Display	Indications
Green	Flash once/ 4-sec	Normal operation
Red	Flash once/ 4-sec	Battery capacity low
	Held on	Charging (held off after fully charged)
Yellow	Flash once / 4-sec	Vibration sensor on
	Held on	1. SMS in transmission 2. SMS in transmission after location fix

Installation

1. Insert SIM card. Open the housing by splitting the seam between up and bottom pieces of housing with your finger nail or suitable tool.



2. After opening, user can find the SIM card socket in the bottom corner. Inset the SIM as indicated below (Except SIM card, there is no user serviceable part. Do not touch or disassemble). After installation, align the up and bottom housing and exert slight pressure on both of them to seal it.



3. Turn on power, 3 LEDs shall flash together for around 12 times, followed by a fully on for few seconds indicating GSM is registering into network (However, if device is held in the status with 3 LEDs on, it may be no SIM card or improper installation of SIM card.
4. After successfully initialization, the green led is flashing once per 4-sec to indicate proper operation.
5. Use SMS command (safe) to setup mobile phone numbers in tracker.

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Operations and SMS commands

Basic commands

Function	SMS Command (case insensitive)	Descriptions
Report tracker location	**LOCATION** (or) **@1** (or) **Call the Tracker**	Send SMS with @1 or LOCATION or call the Tracker to get the actually location
Activate vibration sensor	**safe on** (or) **@2**	Sensor is standing by to detect unusual vibration when parking
Deactivate vibration sensor	**Safe off** (or) **@3**	Put sensor into rest when moving or in secured environment
Setup mobile number of receivers for vibration alarm	**Safe:+49170xxxxxx/+49170****** Safe:+(Country code)(Phone Number)/+(Country code)(Phone number)	The 1st mobile +49170xxxxxx is used for voice call when alarming, the call lasts for 10 seconds and hang up. The 2nd mobile +49170****** is used for sending; the message is ”Target is Moving” **The 1st and 2nd mobile could be the same number*
Low battery warning		When the “safe” mobile number is set, the low power warning is sent through SMS

Note:

After using **@2** or **safe on** to activate sensor function, if the sensor warning is trigger, the tracker will send a SMS warning to user and disable the sensor.

There is no need to use **@3** or **safe off** to disarm the sensor function.

Advance Commands

Function	SMS Command	Descriptions
Setup Controller Phone Number	**Controller:+(country code)(mobile number)** Ex. Controller:+49170xxxxxx	**After setup, tracker can only accept command from the specific mobile number**
Reset Controller phone number	**Reset: (last 6 digits of IMEI #)** Ex. Reset:130617	It is used to reset the controller number to none. One can find the IMEI # as follows

IMEI Number

Last 6 digital: 011099

Charging

1. USB cable to PC or NBPC

2. USB cable to indoor adaptor

3. 12V car charger

Operations

Function	SMS	LED display	Descriptions
Activate vibration sensor for intruder warning	**@2** (or) **Safe on**	Yellow LED flash once / 4-sec	If the **GPS car Tracker** or the vehicle carries the **GPS car Tracker** continuously vibrates for over 3 seconds. The following reactions are triggered • Voice call to the preset number 10 seconds and hang off automatically • Send SMS with the following content "Target is moving"
De-activate vibration sensor	**@3** (or) **Safe off**	Yellow LED off	
Find tracker location	**@1** (or) **LOCATION** (or) **location**	Yellow LED is held on	If GPS Signal is fixed, **GPS car Tracker** send SMS with GPS Position, e.g.: http://maps.google.com/maps?q=25.02880116,121.46919333. A direct click on the URL will show the map on your mobile.
Low battery		Red LED flash once/ 4-sec	A "Battery low" SMS is sent to the mobile number defined by "safe" command.

Specifications

CPU	Silicon Lab C8051F330
GSM Bands	GSM850/GSM900/DCS1800/PCS1900
GPS module	ublox GPS modul
GPS accuracy	±2m (room temperature, open air, continuous tracking)
Dimensions	50 (W)x 7 (D)x 80 (H)mm
Weight	34.5g (Net)
LEDs	3 (Green, Red, Yellow)
Battery	Rechargeable Li-ion, 300 mAh Charging time: 2 hours, Standby: 36 hours
Charger	IN: DC 12~24V 1A (max), OUT:5V/1A for car
Power	30mA conti. / <10mA on Demand
Temperature	Operations: -20°C to 65°C Storage: -30°C to 75°C

Note: The specification is subject to change without prior notice.

Trouble shooting

Phenomenon	Check Items
CAR GPS Tracker inactive	1. Check power switch to “on”
	2. Check LED is on and flashing
CAR GPS Tracker no response to SMS	1. Check SIM card is properly insert into holder
	2. Check PIN code from SIM card is removed
	3. Confirm active status of mobile account
	4. Wait a moment for delay of SMS transmission (3 -5 minutes)
CAR GPS Tracker is held with yellow light on	1. May cause by busy mobile network
	2. Turn off and back on of tracker to normal operation
No GPS fixing	1. Is it indoor?
	2. Is tracker covered by certain metal shield?
Long fixing time for GPS	1. Atmosphere and urban canyon can cause bad reception of GPS signal
	2. It takes longer time to fix in movement than static
GPS accuracy	1. Atmosphere and temperature are possible cause of variation on accuracy
	2. Accuracy is improved after multiple times of location fix
Accuracy of GSM Cell base	1. It relates to the density of GSM Cell in neighborhood or registration station. It is usually more accurate in urban area (100~150m) than suburban area. 2. If the nearest GSM channels are heavily loaded due to major events such big trade show, sports event and etc. The message may respond to the second nearest registration station location available.

Example of Vehicle installation

The location needs to face open air and less metal shielding effect.

Declaration of Conformity

Ge-tectronic declares that the product **GPS car Tracker** to which this declaration refers, conforms to the following standards or standardizing documents.

Complies with the guideline regulations: **Equipment safety** **EN 60335-1:2002**

Low Voltage Directive **73/23/EWG**

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